

Work Order ID 62265

September 24, 2010 8:09:56 AM



Page 1

Item ID: D3936-3

Accept



Setup Start



Revision ID:

Stop



Item Name: Bottom

Start Date: 9/24/10 Start Qty: 4.00



Cust Item ID:

Required Date: 10/01/10 Req'd Qty: 4.00



Customer:

Reference:

Approvals: Process Plan:

Date:

Tooling:

Date:

Run Start



QC:

Date:

SPC (Y/N):

Date:

Stop



Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Tool ID Tool # Plan
Code Accept Reject Reject Insp.
Qty Qty Number Stamp

Draw Nbr

Revision Nbr

D3936

A

100

0.00



Waterjet

Memo

0.00

FLOW CNC Waterjet

6661 . 040

1-Cut as per Dwg D3936

Dwg Rev: A

Prog Rev: D

grain direction per dwg

2-Deburr if necessary

1310-9-27

6

1310-9-27

110

QC2- Inspect parts off machine FAI/FAIB

0.00



QC

Memo

0.00

Quality Control

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Work Order ID 62265

September 24, 2010 8:09:57 AM

Page 2

Item ID: D3936-3

Revision ID:

Item Name: Bottom

Start Date: 9/24/10 Start Qty: 4.00

Required Date: 10/01/10 Req'd Qty: 4.00

Reference:

Approvals: Process Plan: Date: QC: Date:

Sequence ID/
Work Center ID

120



QC

Quality Control

Operation
Description

QC8- Inspect parts - second check

Memo

Set Up/
Run Hours

0.00

0.00

130



Brake NC

Brake NC

Memo

Bend as per Dwg

0.00

0.00

140



QC

Quality Control

QC5- Inspect part completeness to step on W/O

Memo

0.00

0.00

Accept



Setup Start



Stop



Cust Item ID:

Customer:

Run Start



Stop



Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
---------	--------	-----------	------------	------------	---------------	-------------

8 10/02/27

16

SB 10/09/28

6

8 10/08/28

16

16

W/O: 62265

WORK ORDER CHANGES

DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector
		Perm. Change					
10/9/28	#100	ADD steps to Alodine + QC3. As instructed Per Day.	HA	10/10/01			S
10/9/28	#110	Alodine (chemical coat) per AS2005	BR	10-9-30	6		10/09/28
10/9/28	#141	QC3 ensure chemical coat per AS2005	HA	10/09/30	x6		S 10/09/28

Part No: D3936-3 PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Work Order ID 62265

September 24, 2010 8:09:57 AM



Page 3

Item ID: D3936-3

Accept



Setup Start



Revision ID:

Stop



Item Name: Bottom

Start Date: 9/24/10 Start Qty: 4.00



Required Date: 10/01/10 Req'd Qty: 4.00



Cust Item ID:

Customer:

Reference:

Run Start



Approvals: Process Plan:

Date:

Tooling:

Date:

Stop



QC:

Date:

SPC (Y/N):

Date:

Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
---------	--------	-----------	------------	------------	---------------	-------------

150

Identify as per dwg & Stock Location: 185

0.00



Packaging

Memo

0.00

Packaging

160

QC21- Final Inspection - Work Order Release

0.00



QC

Memo

0.00

Quality Control

10/9/30 E

10/10/01 JG
MF
10-9-30

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

September 24, 2010 8:09:55 AM

Page 1

Work Order ID: 62265

Parent Item: D3936-3

Parent Item Name: Bottom



Start Date: 9/24/10

Required Date: 10/01/10

Start Qty: 4.00

Required Qty: 4.00

Comments: IPP RevA: New issue DD verified by:EC

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
M6061T6S.040		Purchased	No			100	sf	73.9300	0.781	3.288421			



6061-T6 .040 Sheet



1210-8-27

Location

Loc Qty

Loc Code

MAT21

73.93

111224

2

113004

71.93

113004

6

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

DART AEROSPACE LTD		Work Order: 62265
Description: Bottom		Part Number: D3936-3
Inspection Dwg: D3936 Rev: A		Page 1 of 1

FIRST ARTICLE INSPECTION CHECKLIST

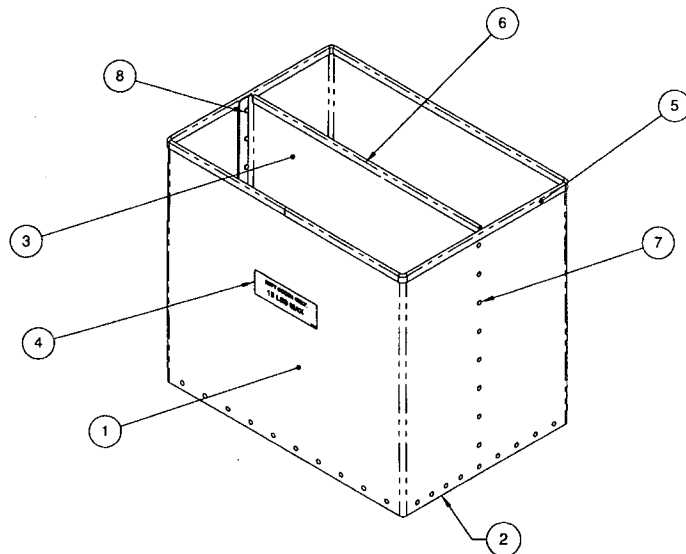
☒ First Article ☐ Prototype

Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
Ø0.098	+0.004/-0.001	.100	✓		✓ 1302	
0.77	+/-0.030	.769	✓		✓	
0.944	+/-0.010	.950	✓		✓	
8.996	+/-0.010	9.001	✓		✓	
4.249	+/-0.010	4.249	✓		✓	
9.900	+/-0.010	9.899	✓		✓	
1.100	+/-0.010	1.097	✓		✓	
1.298	+/-0.010	1.298	✓		✓	
0.785	+/-0.010	.707	✓		✓	
0.705	+/-0.010	.707	✓		✓	
4.798	+/-0.010	4.797	✓		✓	
8.290	+/-0.010	8.282	✓		✓	
12.496	+/-0.010	12.500	✓		✓	
0.040	+/-0.010	.039	✓		✓	

Measured by: JB	Audited by: S	Prototype Approval: N/A
Date: 10-9-27	Date: 10/09/27	Date: N/A

Rev	Date	Change	Revised by	Approved
A	09.09.21	New Issue	KJ	MA

ITEM NO.	QTY. -041	PART NUMBER	DESCRIPTION
1	1	D3936-1	SIDES
2	1	D3936-3	BOTTOM
3	1	D3936-5	DIVIDER
4	1	D3938-3	PLACARD
5	1	D3941-40	RUBBER CUSHION
6	1	D3941-12	RUBBER CUSHION
7	56	MS20426AD3-4	RIVET
8	8	MS20426AD3-5	RIVET



D3936-041 MAPBOX ASSEMBLY

NOTES:

- 1) MATERIAL: N/A
- 2) FINISH: POWDER COAT "BLACK SANDTEX" (4.3.5.7) PER DART QSI 005 4.3
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: IDENTIFY WITH DART P/N "D3936-041" AND B/N USING A WHITE FINE POINT PAINT MARKER
- 7) WEIGHT: 2.54 lbs

ASSEMBLY INSTRUCTIONS

1. BEND D3936-1/-3/-5 PARTS PER SHEETS 2-7.
2. POSITION D3936-5 DIVIDER IN PLACE INSIDE THE D3936-1 SIDES AND CLECO IN PLACE.
3. POSITION THE D3936-3 BOTTOM IN PLACE AGAINST THE D3936-5 DIVIDER AND INSIDE THE D3936-1 SIDES.
4. TRANSFER DRILL 10X $\phi 0.098$ (#40 DRILL) HOLES FROM THE D3936-3 BOTTOM TO THE D3936-5 DIVIDER. PLACE CLECOS IN TRANSFER DRILLED HOLES TO MAINTAIN ALIGNMENT AS THEY ARE DRILLED.
5. TRANSFER DRILL 38X $\phi 0.098$ HOLES FROM D3936-1 SIDES TO D3936-3 BOTTOM. PLACE CLECOS IN TRANSFER DRILLED HOLES TO MAINTAIN ALIGNMENT AS THEY ARE DRILLED.
6. REMOVE ALL CLECOS AND COUNTERSINK 64X EXTERIOR HOLES $\phi 0.179 \times 100^\circ$. DEBURR ALL HOLES IN ALL PARTS.
7. REASSEMBLE PARTS USING CLECOS IN EVERY THIRD HOLE TO MAINTAIN ALIGNMENT.
8. RIVET D3936-1 SIDE TO D3936-5 DIVIDER USING MS20426AD3 RIVETS. INSTALL MS20426AD3 RIVETS RANDOMLY THROUGHOUT ASSEMBLY SO THAT ALL PARTS ARE DRAWN TOGETHER EVENLY.
9. RIVET D3936-5 DIVIDER TO D3936-3 BOTTOM USING MS20426AD3 RIVETS. INSTALL MS20426AD3 RIVETS RANDOMLY THROUGHOUT ASSEMBLY SO THAT ALL PARTS ARE DRAWN TOGETHER EVENLY.
10. RIVET D3936-3 BOTTOM TO D3936-1 SIDE USING MS20426AD3 RIVETS. INSTALL MS20426AD3 RIVETS RANDOMLY THROUGHOUT ASSEMBLY SO THAT ALL PARTS ARE DRAWN TOGETHER EVENLY.
11. POWDER COAT ASSEMBLY PER NOTE 2.
12. TEST FIT RUBBER CUSHION TO TOP EDGE OF MAPBOX. TRIM AS REQUIRED FOR PROPER FIT.
13. REMOVE RUBBER CUSHION.
14. APPLY SMALL BEAD OF SILICONE/ADHESIVE TO TOP EDGE OF MAPBOX.
15. SLIDE RUBBER CUSHION OVER EDGE AND PRESS INTO SILICONE/ADHESIVE.
16. WIPE OFF ANY EXCESS SILICONE/ADHESIVE BEFORE IT DRIES/CURES.
17. APPLY D3938-3 PLACARD AS SHOWN.
18. ALLOW SEALANT/ADHESIVE TO CURE/DRY 24 HRS BEFORE SHIPPING PART.

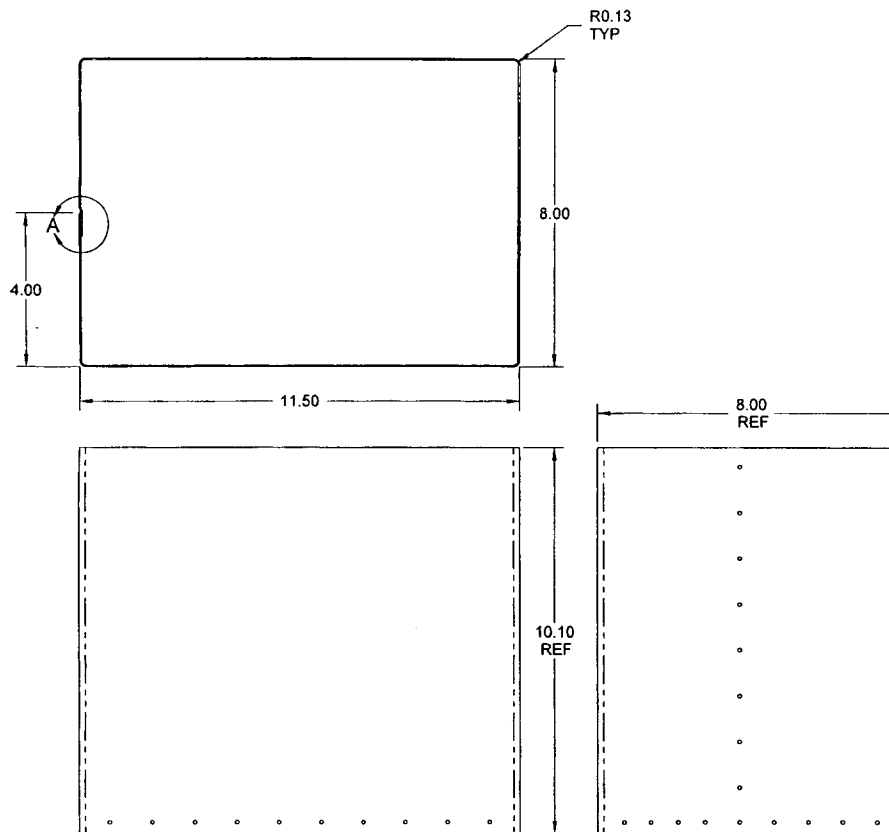
RELEASED
2009-08-28

A	NEW ISSUE		09.07.08
REV.	DESCRIPTION	BY	DATE
DESIGN	<i>JS</i>		
DRAWN	<i>JS</i>		
CHECKED	<i>ALS</i>		
MFG. APPR.	<i>JS</i>		
APPROVED	<i>JS</i>		
DE APPR.	<i>JS</i>		
DATE	09.07.08		

DART AEROSPACE LTD
HAWKESBURY, ONTARIO, CANADA

DRAWING NO. **D3936** REV. A
SHEET 1 OF 7
SCALE
NTS

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D3936-1 SIDES
MADE FROM D3936-1F

DETAIL A
SCALE 5x

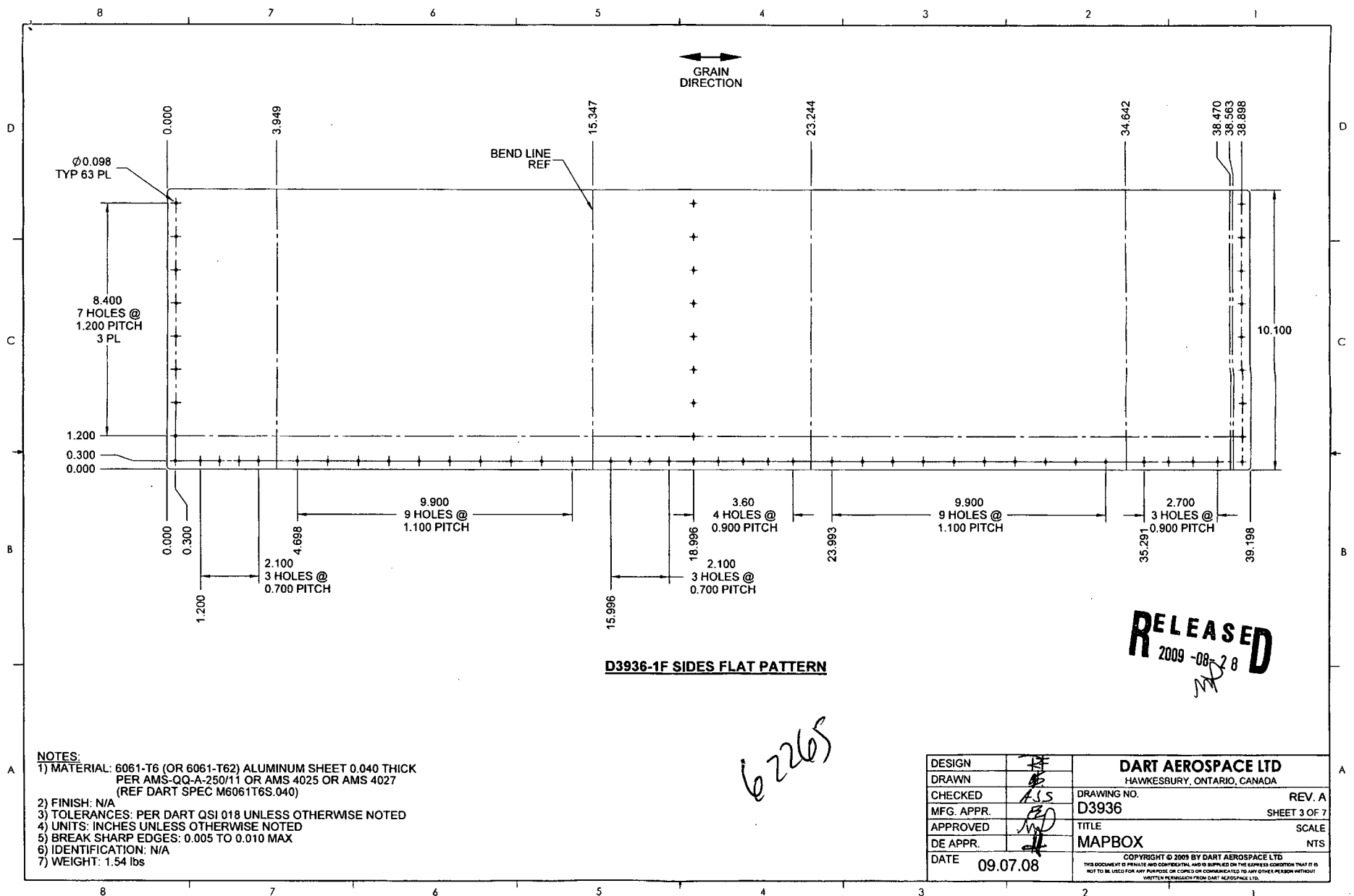
RELEASED
2009-08-28
MS

NOTES:

- 1) MATERIAL: MADE FROM D3936-1F
- 2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: N/A
- 7) WEIGHT: 1.54 lbs

DESIGN	<i>DF</i>	DART AEROSPACE LTD	
DRAWN	<i>DF</i>	HAWKESBURY, ONTARIO, CANADA	
CHECKED	<i>ALS</i>	DRAWING NO. D3936	REV. A
MFG. APPR.	<i>ED</i>		SHEET 2 OF 7
APPROVED	<i>WJH</i>	TITLE MAPBOX	SCALE
DE APPR.	<i>WJH</i>		NTS
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62265

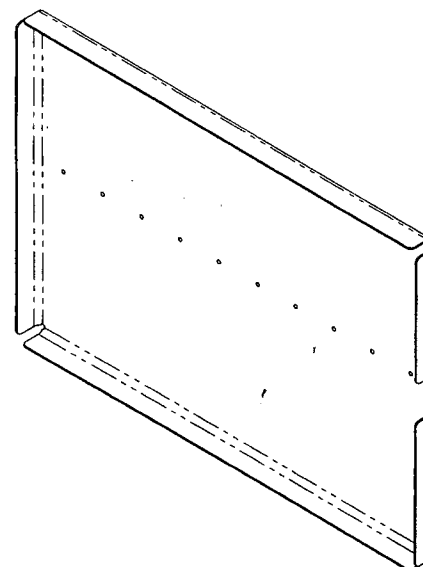
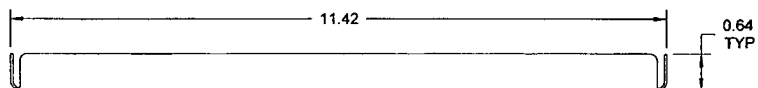
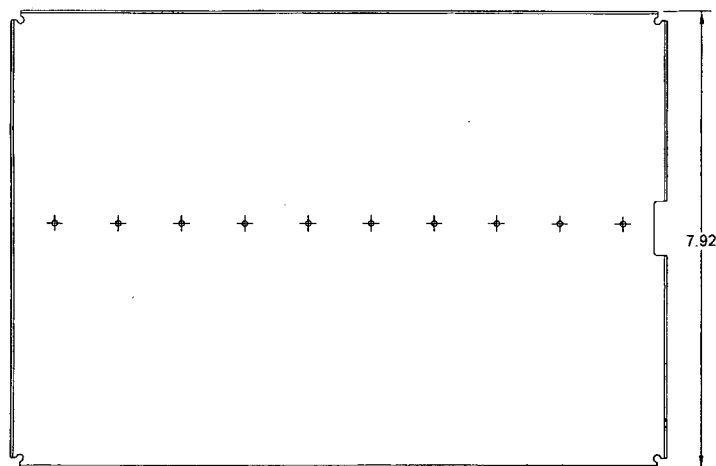


RELEASED
2009-08-28
MD

NOTES:

- 1) MATERIAL: 6061-T6 (OR 6061-T62) ALUMINUM SHEET 0.040 THICK
PER AMS-QQ-A-250/11 OR AMS 4025 OR AMS 4027
(REF DART SPEC M6061T6S.040)
- 2) FINISH: N/A
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: N/A
- 7) WEIGHT: 1.54 lbs

DESIGN	7F	DART AEROSPACE LTD	
DRAWN	AS	HAWKESBURY, ONTARIO, CANADA	
CHECKED	AS	DRAWING NO.	REV. A
MFG. APPR.	AD	D3936	SHEET 3 OF 7
APPROVED	MD	TITLE	SCALE
DE APPR.	MD	MAPBOX	NTS
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D3936-3 BOTTOM
MADE FROM D3936-3F

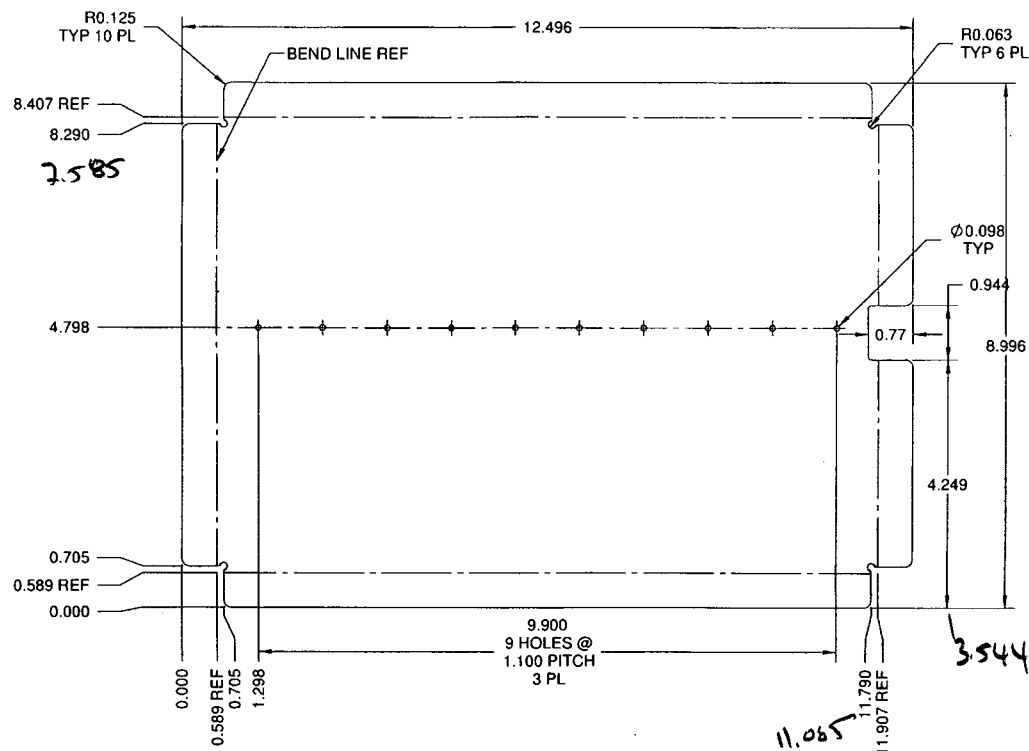
RELEASED
2009-08-28
NMB

62265

NOTES:

- 1) MATERIAL: MADE FROM D3936-3F
- 2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: N/A
- 7) WEIGHT: 0.43 lbs

DESIGN	DF	DART AEROSPACE LTD	
DRAWN	DF	HAWKESBURY, ONTARIO, CANADA	
CHECKED	ALS	DRAWING NO.	REV. A
MFG. APPR.	DF	D3936	SHEET 4 OF 7
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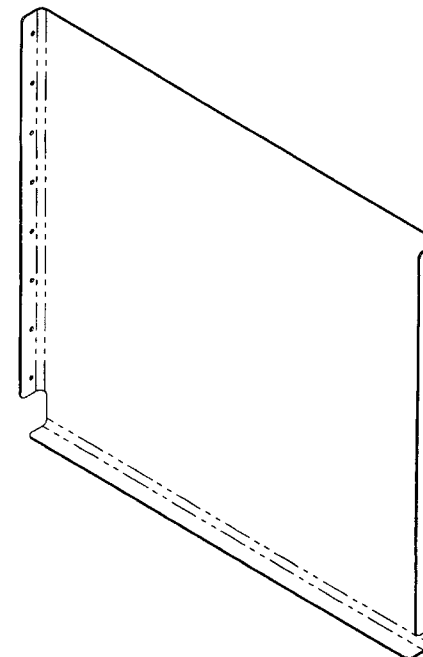
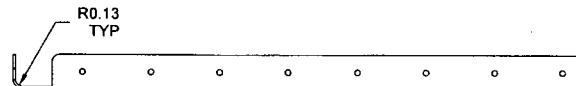
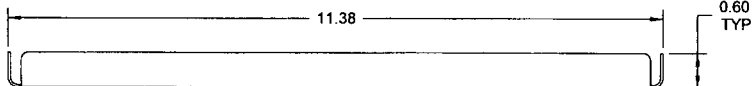
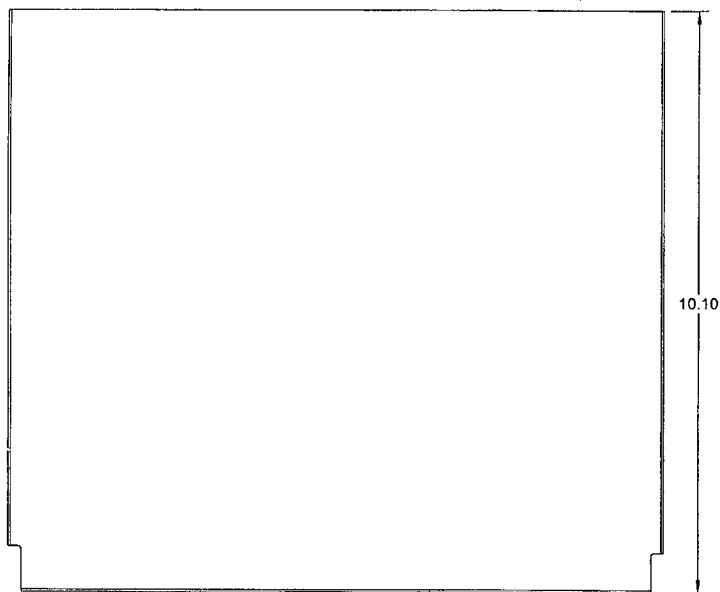


D3936-3F BOTTOM FLAT PATTERN

RELEASED
2009-08-28
MD

- NOTES:
- 1) MATERIAL: 6061-T6 (OR 6061-T62) ALUMINUM SHEET 0.040 THICK
PER AMS-QQ-A-250/11 OR AMS 4025 OR AMS 4027
(REF DART SPEC M6061T6S.040)
 - 2) FINISH: N/A
 - 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
 - 4) UNITS: INCHES UNLESS OTHERWISE NOTED
 - 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
 - 6) IDENTIFICATION: N/A
 - 7) WEIGHT: 0.43 lbs

DESIGN	<i>[Signature]</i>	DART AEROSPACE LTD	
DRAWN	<i>[Signature]</i>	HAWKESBURY, ONTARIO, CANADA	
CHECKED	<i>AJS</i>	DRAWING NO.	REV. A
MFG. APPR.	<i>[Signature]</i>	D3936	SHEET 5 OF 7
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D3936-5 DIVIDER
MADE FROM D3936-5F

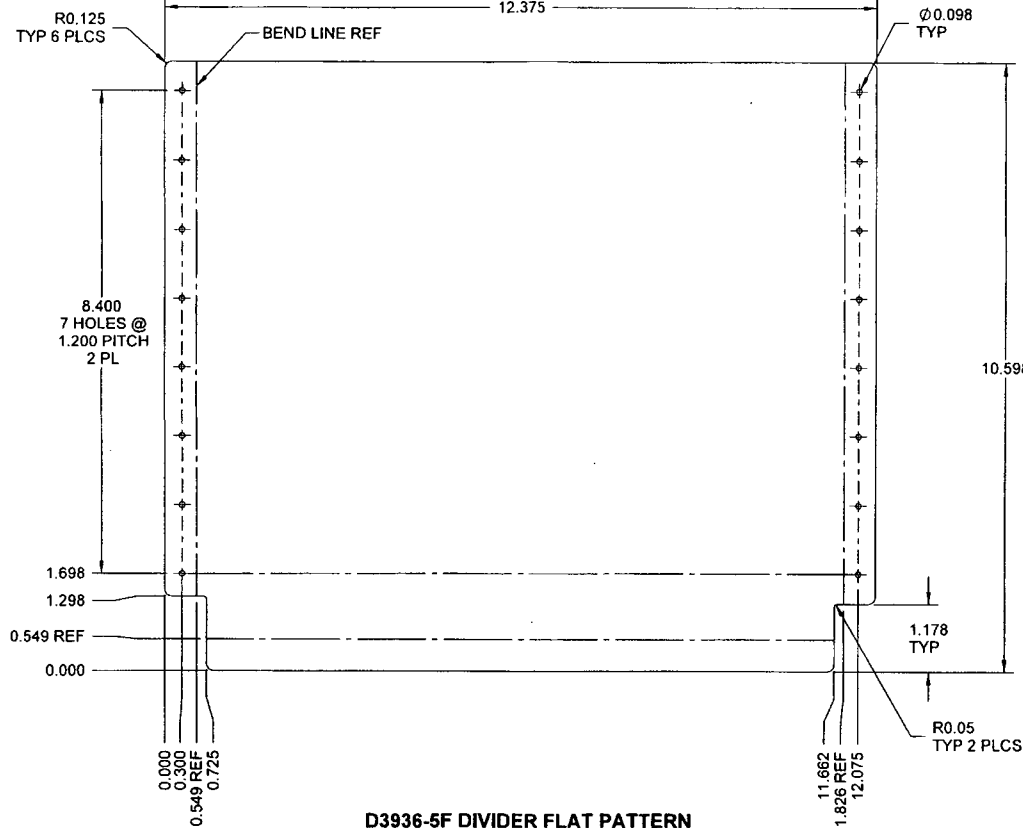
RELEASED
2009-08-28

NOTES:

- 1) MATERIAL: MADE FROM D3936-5F
- 2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: N/A
- 7) WEIGHT: 0.50 lbs

02265

DESIGN	7F	DART AEROSPACE LTD	
DRAWN	AS	HAWKESBURY, ONTARIO, CANADA	
CHECKED	AS	DRAWING NO.	REV. A
MFG. APPR.	AS	D3936	SHEET 6 OF 7
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D3936-5F DIVIDER FLAT PATTERN

RELEASED
2009-08-28

NOTES:

- 1) MATERIAL: 6061-T6 (OR 6061-T62) ALUMINUM SHEET 0.040 THICK
PER AMS-QQ-A-250/11 OR AMS 4025 OR AMS 4027
(REF DART SPEC M6061T6S.040)
- 2) FINISH: N/A
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: N/A
- 7) WEIGHT: 0.50 lbs

62265

DESIGN	HF	DART AEROSPACE LTD	
DRAWN	AS	HAWKESBURY, ONTARIO, CANADA	
CHECKED	AS	DRAWING NO.	REV. A
MFG. APPR.	ED	D3936	SHEET 7 OF 7
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